

After completing this course, the participant will have:

1. Knowledge of differences between the part-time vs full-time wear protocols for Twin-block appliances and the effects on dental and skeletal changes.
2. An understanding of how maxillary third molars react to total arch distalization in adolescents.
3. An awareness of maxillary first molar bone thickness after rapid maxillary expansion in the mixed and permanent dentition.
4. An appreciation for the long-term changes in mandibular incisor alignment in untreated as well as treated subjects with or without retainers.

Article 1: Effectiveness of part-time versus full-time wear protocols of Twin-block appliance on dental and skeletal changes: A randomized controlled trial, by Jeet Parekh et al

1. The aim of this 2-arm parallel study was to compare the dentoalveolar and skeletal changes achieved with Twin-block appliance therapy prescribed on either a part-time or a full-time basis for 18 months.

TRUE
FALSE

2. Inclusion criteria for the study's participants were as follows: 1) Class II division 1 incisor relationship; 2) overjet of 5 mm or more; 3) boys 11-14 years old; 4) girls 11-14 years old; and 5) willingness to participate.

TRUE
FALSE

3. The authors reported a statistical difference in the ANB angle decrease between the part-time (PT) and full-time (FT) groups, with a mean decrease of 1.51° in the PT group and a mean decrease of 2.25° in the FT group.

TRUE
FALSE

4. The authors concluded that there were no differences in dental and skeletal changes between PT and FT wear of a modified Twin-block appliance over a 12-month treatment period.

TRUE
FALSE

Article 2: Short-term cone-beam computerized tomography evaluation of maxillary third molar changes after total arch distalization in adolescents, by Yoon-Jin Lee et al

5. The purpose of this study was to evaluate the effect of maxillary molar distalization with modified C-palatal plates (MCPPs) on unerupted third molars.

TRUE
FALSE

6. The experimental group with MCPP appliances for maxillary molar distalization comprised a total of 23 maxillary third molars for evaluation.

TRUE
FALSE

7. The authors reported that the volume of the maxillary tuberosity after distalization was larger in the MCPP group than in the control group.

TRUE
FALSE

8. The authors concluded that maxillary distalization caused the unerupted third molars to move backward and upward in the MCP group, whereas in the control group they moved downward and forward.

TRUE

FALSE

Article 3: Buccal bone plate thickness after rapid maxillary expansion in mixed and permanent dentitions, by Michele Vito Digregorio et al

9. The aim of this study was to compare changes of buccal bone plate thickness on the maxillary permanent first molars and deciduous second molars after rapid maxillary expansion (RME) in the mixed and permanent dentitions with the use of different types of anchorage.

TRUE

FALSE

10. The study's sample comprised 21 subjects in one group with a mean age of 8.8 years and RME with the use of deciduous teeth as anchorage and 16 subjects in the other group with a mean age of 13.9 years and RME with the use of permanent teeth as anchorage.

TRUE

FALSE

11. The authors reported that RME performed in the mixed dentition with deciduous teeth as anchorage did not reduce bone plate thickness of the maxillary permanent first molars, except for the mesial roots in both sides.

TRUE

FALSE

12. The authors concluded that the clinical significance of the bone loss (range 0.73-1.25 mm) might be doubtful and is not strongly relevant.

TRUE

FALSE

Article 4: Mandibular incisor alignment in untreated subjects compared with long-term changes after orthodontic treatment with or without retainers, by Ulrike Schütz-Fransson et al

13. The aim of this study was to analyze the dental and skeletal changes in patients treated with fixed orthodontic appliances with either removable or fixed retention and to compare those changes with untreated subjects.

TRUE

FALSE

14. The untreated group comprised 25 subjects exhibiting Class II malocclusions with mild to moderate crowding.

TRUE

FALSE

15. The authors reported that no differences were found in dental irregularity of mandibular incisors 12 years after treatment between the group that had a retainer and the group that had no retainers after treatment.

TRUE

FALSE

16. The authors concluded that the use of mandibular retainers for 2 or 3 years does not appear to prevent long-term relapse and that only life-long retention will constrain the natural changes.

TRUE

FALSE